EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Michael P. Byrne on 15 November 2011.

3. The application has been amended as follows:

In the specification:

Replace the abstract with:

Plastic foam has excellent heat insulation properties, however, moisture absorption is causing a decrease in the heat insulation, and plastic foam has almost no mechanical strength. Therefore, a heat insulation material that absorbs almost no moisture and has satisfactory strength is desired to appear. According to the present invention, a foam composite with a skin can be formed in one shot by charging plastic powders or minute particles together with polyolefin pellets that can be cross-linked and foamed in a mold, and heating the mold while rotating. The composite absorbs almost no moisture, having satisfactory strength, being excellent as an insulating material. Further, providing a covering of a non-foaming or a slightly foaming material to the pellet of polyolefin that can be cross-linked and foamed, and conducting the forming, foamed granules of preferably 5 to 50 mm largeness as a core, and a covering of a reinforcing member with 0.05 to 0.5 mm thickness for the core, can be formed, which permits

that thus obtained shaped body is lightweight, strong, with an equivalent strength to wood that undergoes deformation without breaking when subjected to impact.

In the claims:

Amend claim 2 as:

A process for producing a foam composite having a skin with an even thickness and a core comprising foamed bodies with homogeneous and fine bubbles and spherical plastic reinforcing members with an even thickness covering each of the foamed bodies, comprising:

charging a mold with one of plastic powders and plastic minute particles, and polyolefin pellets that are larger than the one of the plastic powders and the plastic minute particles, wherein the polyolefin pellets are covered in the whole surface with plastic and are cross-linkable and foamable; and

heating the mold from the outside of the mold;

rotating the mold at within a range from 1 to 20 rpm, so that a plastic skin is formed and the pellets adhere to the skin; and

further heating the mold, thereby permitting the polyolefin cross-links and the pellets to expand by the decomposition of a foaming agent,

wherein

the thickness of the skin is within a range from 1 to 10 mm;

a number of the foamed bodies, which are bonded each other to constitute the core, are formed from the polyolefin pellets;

a number of the foamed bodies are connected in three dimensions;

the density of the foamed bodies is from 0.1 to 0.01 g/cm3;

~~the diameter of the foamed bodies is from 5 to 25 mm;~~

~~the thickness of the spherical reinforcing members is from 0.05 to 0.5 mm;~~

the thickness of the core is from 10 to 100 mm; and

the thickness of the foam composite is 25 mm or more,

and wherein the polyolefin pellets are formed by

covering a rod of polyolefin with plastic;

compressing the rod of polyolefin in a molten state to a thickness of plastic in a bonded region of 0.3 mm or more;

cutting the rod of polyolefin;

bonding edge sections of the rod of polyolefin, thereby obtaining pellets with a covering of the plastic in the whole polyolefin surface to form the polyolefin pellets; and

foaming the polyolefin pellets, thereby permitting the foam composite to have a skin with an even thickness and a core, in which nearly even size granular foamed bodies with a covering of a reinforcing member with practically even thickness are integrated, bonded mutually, filling in the core, and further, bonded to the skin.

Cancel claim 3, 15-29.

In claim 10, line 2; “10” was deleted and - -2- - was inserted therein.

Amend claim 30 as:

~~The~~ A process for producing a foam composite having a skin with an even thickness and a core comprising foamed bodies with homogeneous and fine bubbles and spherical plastic reinforcing members with an even thickness covering each of the foamed bodies, comprising:

charging a mold with one of plastic powders and plastic minute particles, and polyolefin pellets that are larger than the one of the plastic powders and the plastic minute particles, wherein the polyolefin pellets are covered in the whole surface with plastic and are cross-linkable and foamable; and

heating the mold from the outside of the mold;

rotating the mold at within a range from 1 to 20 rpm, so that a plastic skin is formed and the pellets adhere to the skin; and

further heating the mold, thereby permitting the polyolefin cross-links and the pellets to expand by the decomposition of a foaming agent,

wherein

the thickness of the skin is within a range from 1 to 10 mm;

a number of the foamed bodies, which are bonded each other to constitute the core, are formed from the polyolefin pellets;

a number of the foamed bodies are connected in three dimensions;

the density of the foamed bodies is from 0.1 to 0.01 g/cm3;

the diameter of the foamed bodies is from 5 to 25 mm;

the thickness of the spherical reinforcing members is from 0.05 to 0.5 mm;

the thickness of the core is from 10 to 100 mm; and

the thickness of the foam composite is 25 mm or more.

~~according to claim 2, further comprising:~~ and wherein the polyolefin pellets are formed by

extruding a polyolefin, which is cross-linkable and foamable, into a rod of polyolefin with a diameter of 2 to 10 mm;

covering the rod of polyolefin with a plastic, thereby obtaining the rod of polyolefin with a covering of the plastic with a thickness of 0.5 to 5 mm;

compressing the rod of polyolefin in a molten state to have a thickness of plastic in a bonded region of 0.3 mm or more;

cutting the rod of polyolefin; and

bonding edge sections of the rod of polyolefin, thereby obtaining the polyolefin pellets with the covering of the plastic in the whole polyolefin surface.

Add new claim 31:

The process for producing a foam composite according to claim 2, wherein the diameter of the foamed bodies is from 5 to 25 mm and the thickness of the spherical reinforcing members is from 0.05 to 0.5 mm;

REASONS FOR ALLOWANCE

4. The following is an examiner's statement of reasons for allowance:

5. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. §102 or §103 would be proper. The prior art does not teach or render obvious a process of forming a foam composite in which polyolefin pellets are coated and compressed such that the thickness of the plastic in the bonded region is 0.3 mm or more.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN SCHIFFMAN whose telephone number is (571)270-7626. The examiner can normally be reached on Monday through Thursday from 9AM until 4PM.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CHRISTINA JOHNSON can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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